

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE  
in its capacity as elected Office

Date of mailing:

19 April 2001 (19.04.01)

International application No.:

PCT/US00/27132

Applicant's or agent's file reference:

CM2212MQ/VB

International filing date:

02 October 2000 (02.10.00)

Priority date:

08 October 1999 (08.10.99)

Applicant:

DYATLOV, Valery Alexandrovich et al

1. The designated Office is hereby notified of its election made:



in the demand filed with the International preliminary Examining Authority on:

05 February 2001 (05.02.01)



in a notice effecting later election filed with the International Bureau on:

2. The election



was



was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer:

J. Zahra

Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

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REC'D 07 JAN 2002

WIPO PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference CM2212MQ/VB	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/27132	International filing date (day/month/year) 02/10/2000	Priority date (day/month/year) 08/10/1999
International Patent Classification (IPC) or national classification and IPC C08J9/00		
Applicant THE PROCTER & GAMBLE COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand  05/02/2001	Date of completion of this report  03.01.2002
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Contet, F  Telephone No. +49 89 2399 8671 

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/27132

## I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, pages:**

1-9 as originally filed

**Claims, No.:**

1-9 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US00/27132

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims
	No: Claims 1-9
Inventive step (IS)	Yes: Claims
	No: Claims 1-9
Industrial applicability (IA)	Yes: Claims 1-9
	No: Claims

**2. Citations and explanations**  
**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
**see separate sheet**

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following documents:

D1: WO 95 25757 A (COATES GEOFFREY W ;UNIV LELAND STANFORD JUNIOR (US); WAYMOUTH ROBE) 28 September 1995 (1995-09-28)

Claim 1 is concerned with a polymeric foam material comprising a polyolefinic homopolymer having an isotacticity of less than 60% of [mmmm] pentad concentration. Claim 2 is concerned with the same product, further characterised by a mean molecular weight of at least 100 000 g/ml.

D1 discloses a polymerisation process of polypropylene. According to Claims 31 and 32 and p.9, l.34 to p.10, l.37, thermoplastic elastomeric polypropylene having an average molecular weight of 200 000 to  $2 \cdot 10^6$  and an isotactic pentad content above 6.0 and preferably less than 60% (see also page 14, lines 22-29 and the examples 40- 43). Foam material can be prepared (p.15, line 27).

The argument brought forward by the applicant that, according to page 3 of the description, " the term "polyolefinic homopolymer" refers to those polyolefins which comprise only one phase of molecules all of which exhibiting a similar configuration." and explicitly exclude mixtures of atactic and isotactic polymers where the two phases have polymerised simultaneously, cannot be retained.

For the skilled person, the term "homopolymer" means the resulting product of the polymerisation of a single monomeric compound, independently from the stereochemical control achieved with the selected catalyst and process parameters. Thus, the term "homopolymer", cannot establish a distinction between the different stereoisomeric arrangements demonstrated by the various polymers obtained from the same monomers such as atactic, isotactic and/or syndiotactic for polypropylene.

Therefore the alleged selection, the polyolefins comprise "only one phase of molecules all of which exhibiting a similar stereochemical configuration." is an

essential feature of the invention.

As far as this feature has not been introduced into in the claims, the document D1 is novelty destroying for the subject-matter of present claims 1 to 8.

The properties disclosed in claims 3 to 6 are not able to confer novelty to the foam material claimed, since these properties are bound to the homopolymer itself (see also Item VIII).

The foaming processes disclosed in present claim 9 are well known from the skilled person and novelty of the method claimed cannot be acknowledged over the teaching of D1.

### **III- Industrial applicability**

Polymeric foam material having improved mechanical properties.

#### **Re Item VIII**

#### **Certain observations on the international application**

The properties "stretchable", "elastically expandable", "oil absorbent" or " water absorbent" are unclear. If these features are considered to have a limitative character, i.e. if it has been introduced to exclude some polymeric foam which does not solve the problem underlying the present Application, they should be clearly defined according to the description, optionally, by means of the methods of measurement.

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>CM2212MQ/VB</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 00/ 27132</b>	International filing date (day/month/year) <b>02/10/2000</b>	(Earliest) Priority Date (day/month/year) <b>08/10/1999</b>
Applicant <b>THE PROCTER &amp; GAMBLE COMPANY et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 02 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/IS 00/27132

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 C08J9/00 //C08L23:02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08J C08L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EP0-Internal, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 25757 A (COATES GEOFFREY W ;UNIV LELAND STANFORD JUNIOR (US); WAYMOUTH ROBE) 28 September 1995 (1995-09-28) claims 31,32 page 14, line 22 -page 15, line 28 ---	1
A	US 4 542 164 A (NISHIOKA TAKESHI ET AL) 17 September 1985 (1985-09-17) claims 1,11 -----	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

9 November 2000

Date of mailing of the international search report

16/11/2000

Name and mailing address of the ISA

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Authorized officer

Niaounakis, M



# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/27132

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9525757 A	28-09-1995	US 5594080 A	14-01-1997
		AU 697375 B	01-10-1998
		AU 2191195 A	09-10-1995
		BR 9507184 A	07-10-1997
		CA 2186105 A	28-09-1995
		CN 1172488 A	04-02-1998
		CZ 9602773 A	12-03-1997
		EP 0802935 A	29-10-1997
		JP 9510745 T	28-10-1997
		PL 316415 A	06-01-1997
		US 5969070 A	19-10-1999
US 4542164 A	17-09-1985	JP 59062641 A	10-04-1984
		JP 62026653 B	10-06-1987
		JP 1490350 C	07-04-1989
		JP 59071338 A	23-04-1984
		JP 62026654 B	10-06-1987

## CLAIMS

1. A polymeric foam material characterized in that said polymeric foam material comprises a polyolefinic homopolymer having an isotacticity of less than 60% of [mmmm] pentad concentration.
2. A polymeric foam material according to Claim 1 wherein the homopolymer has a mean molecular weight Mw of at least 100000 g/mol.
3. A polymeric foam material according to Claim 1 wherein said polymeric foam material is stretchable.
4. A polymeric foam material according to Claim 2 wherein said foam material is elastically expandable.
5. An foam material of the present invention according to [any of Claims 1 through Claim 3] CLAIM 1 wherein said foam material is oil absorbent.
6. A foam material of the present invention according to [any of Claims 1 through Claim 3] CLAIM 1 wherein said foam material is water absorbent.
7. A polymeric foam material according to [any of the preceding claims] CLAIM 1 wherein

said polyolefinic polymer is polypropylene.

8. An article comprising the foam material according to <sup>CLAIM 1</sup> any of the preceding claims wherein said article comprises said foam material as a construction element.
9. A method for manufacturing a polymeric foam material comprising a step of processing a polymeric material, said step of processing selected from the group of inert gas expansion, evaporated solvent expansion, reactive reagent gas expansion, high internal phase emulsion, bead expansion, and combinations thereof characterized in that said polymeric material comprises a polyolefinic homopolymer having a an isotacticity of less than 60% of [mmmm] pentad concentration.

# INTERNATIONAL SEARCH REPORT

Int. Application No.  
PCT/US 00/27132

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C08J9/00 //C08L23:02

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08J C08L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal, COMPENDEX

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 25757 A (COATES GEOFFREY W ;UNIV LELAND STANFORD JUNIOR (US); WAYMOUTH ROBE) 28 September 1995 (1995-09-28) claims 31,32 page 14, line 22 -page 15, line 28	1
A	US 4 542 164 A (NISHIOKA TAKESHI ET AL) 17 September 1985 (1985-09-17) claims 1,11	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search

9 November 2000

Date of mailing of the international search report

16/11/2000

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Authorized officer

Niaounakis, M

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Int. Application No

PCT/US90/27132

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9525757 A	28-09-1995	US 5594080 A	14-01-1997
		AU 697375 B	01-10-1998
		AU 2191195 A	09-10-1995
		BR 9507184 A	07-10-1997
		CA 2186105 A	28-09-1995
		CN 1172488 A	04-02-1998
		CZ 9602773 A	12-03-1997
		EP 0802935 A	29-10-1997
		JP 9510745 T	28-10-1997
		PL 316415 A	06-01-1997
		US 5969070 A	19-10-1999
US 4542164 A	17-09-1985	JP 59062641 A	10-04-1984
		JP 62026653 B	10-06-1987
		JP 1490350 C	07-04-1989
		JP 59071338 A	23-04-1984
		JP 62026654 B	10-06-1987